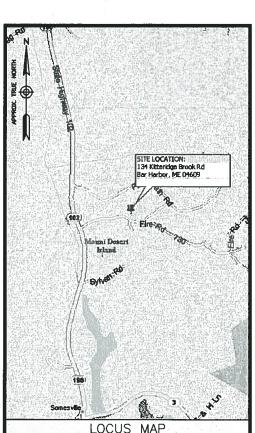


# BAR HARBOR SOUTH SITE NO.: 2267 134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609



ENGINEER
DEWBERRY
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210

PHONE # (617) 695-3400 FAX # (617) 695-3310

CONTACT: BENJAMIN REVETTE

SITE ACQUISITION

KJK WIRELESS
127 RIDGE ROAD

PHONE # (603) 821-1511

CONTACT: KEN KOZYRA

CONSTRUCTION
SAI COMMUNICATIONS
22 KEEWAYDIN DRIVE

PHONE # (603) 421-0470 FAX # (603) 893-1104

CONTACT: TOM ALLAIN

CONSULTANT TEAM

SITE NAME: BAR HARBOR SOUTH

PROPERTY OWNER:
RICHARD TAYLOR
134 KITTERIDGE BROOK ROAD
BAR HARBOR, ME 04609

APPLICANT/DEVELOPER:

AT&T MOBILITY
550 COCHITUATE ROAD
SUITES 13 & 14

ELECTRIC UTILITY: BANGOR HYDRO ELECTRIC (207) 947-2414

TELEPHONE UTILITY: FAIRPOINT COMMUNICATIONS (866) 984-3001

CENTER OF PROPOSED TOWER:\*

LATITUDE: 44"22"57.83" N LONGITUDE: 68"19"00.23" W
EXISTING GROUND ELEVATION: 150.6"

\* PER SURVEY

PROJECT SUMMARY

SITE ADDRESS: 134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

ZONING DISTRICT: RURAL-RESIDENTIAL ZONE

PROJECT DIRECTORY

A PROPOSED 125' A.G.L. TALL MONOPINE, EQUIPMENT SHELTER, AND DIESEL GENERATOR WILL BE INSTALLED AT GRADE INSIDE A PROPOSED FENCED COMPOUND. UP TO TWELVE (12) PANEL ANTENNAS WILL BE INSTALLED (4/SECTOR) ON THE PROPOSED 125' A.G.L. TALL MONOPINE. POWER & TELCO WILL COME FROM AN EXISTING UTILITY POLE ON THE PROPERTY.

PROJECT DESCRIPTION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITI AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

SHT. NO.	DESCRIPTION			
T-1	TITLE SHEET			
	OFNEON MOTEO			
G-1	GENERAL NOTES			
C-1	ABUTTERS PLAN			
C-2	TREE STUDY PLAN			
C-3	SITE & GRADING PLAN I-II			
C-4	ROAD PROFILE			
C-5	DETAILED SITE PLAN & ELEVATION			
C-6	CONSTRUCTION DETAILS—I			
C-7	CONSTRUCTION DETAILS—II			
C-8	CONSTRUCTION DETAILS—III			
C-9	ANTENNA B.O.M. & ANTENNA DETAILS			
E-1	ELECTRICAL RISER DIAGRAM			
E-2	SCHEMATIC GROUNDING PLAN			
E-3	GROUNDING DETAILS			
	CROSHDING BEINES			
	7 (1)			
· ·				
11	SHEET INDEX			

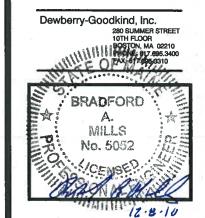


BAR HARBOR SOUTH SITE NO.: 2267

FRAMINGHAM, MA 01701

	CONSTRUCTION DRAWINGS				
				77 12	
	11			7.5	
8	1	12/08/10	FOR	R SUBMITTAL	
	0	09/03/10	FOF	R SUBMITTAL	
	Α	08/18/10	FO	R COMMENT	

# Dewberry



DRAWN BY: SK

REVIEWED BY: GMT

CHECKED BY: PPB

JOB NUMBER: 50040092

50003936

SITE ADDRESS

PROJECT NUMBER:

134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

TITLE SHEET

SHEET NUMBER

Γ--- 1

FROM FRAMINGHAM, TAKE I-90 E. TAKE EXIT 14 FOR I-95 N, PASSING THROUGH NEW HAMPSHIRE AND ENTERING MAINE. TAKE EXIT 52 TOWARD I-295 ONTO MAINE TURNPIKE FALMOUTH SPUR. TAKE EXIT 52 TOWARD I-295 N TOWARD FREEPORT MERGE ONTO I-95 N. TAKE EXIT 182A TO MERGE ONTO I-395 E. TOWARD BANGOR. CONTINUE TO FOLLOW I-395 E. TAKE EXIT 6A TO MERGE ONTO U.S. 1A E/WILSON ST TOWARD BAR HARBOR. CONTINUE TO FOLLOW U.S. 1A E. CONTINUE ONTO HIGH ST. CONTINUE ONTO ME-102 S/MAIN ST. TURN LEFT TO STAY ON ME-102 S/MAIN ST. TURN LEFT TO STAY ON ME-102 S/MAIN ST. TURN LEFT AT KITTERIDGE BROOK ROAD. THE SITE ACCESS WILL BE ON THE LEFT.

#### **GENERAL CONSTRUCTION NOTES:**

- 1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH AT&T MOBILITY SPECIFICATIONS.
- 2. CONTRACTOR SHALL CONTACT "DIG SAFE 1888 DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- 5. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 8. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- 9. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK
- 10. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING.
- 11. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- 12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T MOBILITY CONSTRUCTION MANAGER.
- 13. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- 14. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, AT&T MOBILITY PROJECT CONSTRUCTION MANAGER, AND LANDLORD IMMEDIATELY.
- 15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- 16. ALL ROOF WORK SHALL BE DONE BY A QUALIFIED AND EXPERIENCED ROOFING CONTRACTOR IN COORDINATION WITH ANY CONTRACTOR WARRANTING THE ROOF TO ENSURE THAT THE WARRANTY IS MAINTAINED.
- 17. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- 18. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- 19. CONTRACTOR SHALL FURNISH AT&T MOBILITY WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK
- ANTENNAS AND CABLES ARE TYPICALLY PROVIDED BY AT&T MOBILITY. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY AT&T MOBILITY WIRELESS. ALL ITEMS NOT PROVIDED BY AT&T MOBILITY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY AT&T MOBILITY.
- 21. PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH AT&T MOBILITY PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY AT&T MOBILITY. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
- 22. CONTRACTOR SHALL START UP HVAC UNITS AND SYNCHRONIZE THE THERMOSTATS
- 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
- 24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION
- 25. UNLESS OTHERWISE NOTED AT&T MOBILITY SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS—T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- 26. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
- 27. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 28. CONTRACTOR SHALL NOTIFY DEWBERRY A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.

#### **EROSION AND SEDIMENT CONTROL PLAN:**

PURSUANT TO SECTION 125-67(Q) OF THE TOWN OF BAR HARBOR LAND USE ORDINANCE, THE PROPOSED DEVELOPMENT WILL NOT CAUSE UNREASONABLE SOIL EROSION OR A REDUCTION IN THE LAND'S CAPACITY TO HOLD WATER SO THAT A DANGEROUS OR UNHEALTHY CONDITION RESULTS AND FURTHER THAT THE FOLLOWING STANDARDS WILL BE MET DURING CONSTRUCTION AND AFTER COMPLETION:

- 1. STRIPPING OF VEGETATION, REGRADING OR OTHER DEVELOPMENT SHALL BE DONE IN SUCH A WAY AS TO MINIMIZE FROSION:
- DEVELOPMENT SHALL PRESERVE SALIENT NATURAL FEATURES, KEEP CUT AND FILL OPERATIONS TO A MINIMUM AND ENSURE CONFORMITY WITH TOPOGRAPHY SO AS TO CREATE
- THE TOP OF A CUT OR THE BOTTOM OF A FILL SECTION SHALL NOT BE CLOSER THAN 10 FEET TO AN ADJOINING PROPERTY, UNLESS OTHERWISE SPECIFIED IN THIS CHAPTER, AND IN NO INSTANCE SHALL A CUT OR A FILL EXCEED A THREE—TO—ONE SLOPE;
- 4. THE DEVELOPMENT SHALL NOT UNREASONABLY INCREASE THE RATE OR VOLUME OF SURFACE WATER RUNOFF FROM THE PROPOSED SITE:
- 5. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED;
- THE DISTURBED AREA AND THE DURATION OF EXPOSURE SHALL BE KEPT TO A PRACTICAL MINIMUM
- 7. DISTURBED SOILS SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE;
- B. DUST CONTROL METHODS SHALL BE EMPLOYED DURING DRY CONDITIONS:
- TEMPORARY VEGETATION OR MULCHING SHALL BE USED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT;
- 10. THE PERMANENT VEGETATION AND MECHANICAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE ON THE SITE, BUT IN NO EVENT LATER THAN SIX MONTHS AFTER COMPLETION OF CONSTRUCTION;
- 11. UNTIL THE DISTURBED AREA IS STABILIZED, SEDIMENT IN THE RUNOFF WATER SHALL BE TRAPPED BY THE USE OF DEBRIS BASINS, SEDIMENT BASINS, SILT TRAPS OR OTHER ACCEPTABLE METHODS:
- 12. WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER CAUSING SUCH SEDIMENTATION TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AT HIS EXPENSE AS QUICKLY AS POSSIBLE:
- 13. IT IS THE RESPONSIBILITY OF ANY PERSON DOING ANY ACT ON OR ACROSS A COMMUNAL STREAM, WATERCOURSE OR SWALE OR UPON THE FLOODWAY OR RIGHT-OF-WAY THEREOF TO MAINTAIN AS NEARLY AS POSSIBLE IN ITS PRESENT STATE THE STREAM, WATERCOURSE, SWALE, FLOODWAY OR RIGHT-OF-WAY DURING THE DURATION OF SUCH ACTIVITY AND TO RETURN IT TO ITS ORIGINAL OR EQUAL CONDITION AFTER SUCH ACTIVITY IS COMPLETED; AND
- MAINTENANCE OF DRAINAGE FACILITIES OR WATERCOURSES ORIGINATING AND COMPLETELY ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE OWNER TO THE POINT OF OPEN DISCHARGE AT THE PROPERTY LINE OR AT A COMMUNAL WATERCOURSE WITHIN THE PROPERTY.
- 15. THE PROPOSED DEVELOPMENT SHALL USE THE MAINE EROSION AND SEDIMENT CONTROL BMPS (BEST MANAGEMENT PRACTICES) PUBLISHED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION IN THE CONTROL OF SEDIMENT AND EROSION.

#### **CONCRETE AND REINFORCING STEEL NOTES:**

- DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
- 2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE AND SUBMITTED TO ENGINEER PRIOR TO PLACING CONCRETE
- 3. CONCRETE SHALL BE NORMAL WEIGHT, 6 % AIR ENTRAINED (+/- 1.5%) WITH A MAXIMUM 4" SLUMP AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED.
- THE FOLLOWING MATERIALS SHALL BE USED:
  PORTLAND CEMENT: ASTM C-150, TYPE 1 OR 2
  REINFORCEMENT: ASTM A-185, PLAIN STEEL WELDED WIRE FABRIC REINFORCEMENT BARS: ASTM A615, GRADE 60, DEFORMED NORMAL WEIGHT AGGREGATE: ASTM C-33 ADMIXTURES: NON-CHLORIDE CONTAINING
- 5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED): A. CONCRETE CAST AGAINST EARTH: 3°
  B. ALL OTHER CONCRETE: 2°
- 6. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
- 7. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
- 8. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI 301.
- 9. DO NOT WELD OR TACK WELD REINFORCING STEEL.
- ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
- 11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- 12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND
- 13. DO NOT ALLOW REINFORCEMENT, CONCRETE OR SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 3 DAYS
- 14. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
- 15. CONCRETE SHALL BE RUBBED TO A ROUGH GROUT FINISH. PADS SHALL BE SEALED BY STEEL TROWEL.
- 16. UNLESS OTHERWISE NOTED:
- A ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
- B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- 17. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
- 18. REINFORCING BAR DEVELOPMENT LENGTHS, AS COMPUTED IN ACCORDANCE WITH ACI 318, FORM THE BASIS FOR BAR EMBEDMENT LENGTHS AND BAR SPLICED LENGTHS SHOWN IN THE DRAWINGS. APPLY APPROPRIATE MODIFICATION FACTORS FOR TOP STEEL, BAR SPACING, COVER AND THE LIKE.
- 19. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
- 20. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
- 21. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL
- 22. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 8".
- 23. BAR SUPPORTS SHALL BE ALL-GALVINIZED METAL WITH PLASTIC TIPS.
- 24. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE, TIE WIRE SHALL BE 16 GAUGE
- A. COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH SLAB.
- B. PROVIDE VAPOR BARRIER BENEATH SLAB ON GROUND.

#### **GENERAL FOUNDATION NOTES:**

(APPLICABLE FOR EQUIPMENT SHELTER ONLY)

- THOROUGHLY COMPACT BOTTOM OF EXCAVATIONS PRIOR TO PLACING RIGID INSULATION BARRIER. BACKFILL AND COMPACTION PROCEDURES SHALL BE DONE PER
- 2. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. SECURE REINFORCING IN PLACE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT.
- 3. PROVIDE A CLEAR COVER OF 2" FOR ALL REINFORCING STEEL. THIS REQUIREMENT SHALL BE CONSIDERED ACTUAL AND SHOULD NOT BE ADJUSTED IN THE FIELD.
- 4. VERIFY DETAILS AND DIMENSIONS WITH SHELTER DRAWINGS. NOTIFY AT&T MOBILITY OF ANY DISCREPANCIES.
- 5. ALL WORK SHALL COMPLY WITH THE STATE BUILDING CODES.
- 6. INSULATION BARRIER PROVIDED IS FOR FROST PROTECTION IN LIEU OF STANDARD FOUNDATIONS WITH BEARING AT CODE REQUIRED FROST DEPTH.
- 7. SHELTER MUST BE ANCHORED TO ITS FOUNDATION. ANCHOR IN ACCORDANCE WITH SHELTER MANUFACTURER SPECIFICATIONS.

#### STRUCTURAL NOTE:

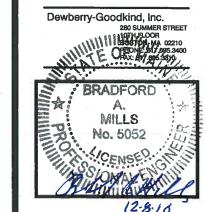
AS REQUIRED UNDER ANNEX F OF THE TA/EIA 222F - STANDARD, SAI SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED MAINE STRUCTURAL ENGINEER CERTIFYING THAT, THE EXISTING TOWER AND ANY REQUIRED IMPROVEMENTS AND REINFORCEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, SUPPORTS AND APPURITEMANCES AND COMPLIES WITH THE CURRENT LOCAL BUILDING CODE AND EA/THA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY IMPROVEMENTS AND REINFORMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWINGS OR OTHERWISE NOTED IN THE STRUCTURAL



BAR HARBOR SOUTH **SITE NO.: 2267** 

1					
	CONSTRUCTION DRAWINGS				
				100	
	1	12/08/10	FOF	SUBMITTAL	
ď.	0	09/03/10	FOF	SUBMITTAL	
	Α	08/18/10	FOF	COMMENT	





DRAWN	BY:	SK

REVIEWED BY GMT CHECKED BY PPB

JOB NUMBER: 50040092

50003936

SITE ADDRESS

PROJECT NUMBER

134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

GENERAL NOTES

SHEET NUMBER



JULY 28, 2010 2. VERTICAL DATUM: NORTH AMERICAN VERTICAL

DATUM OF 1988 (NAVD88) NORTH AMERICAN DATUM OF 3. HORIZONTAL DATUM: 1983 (NAD83) GEOID 09.

4. CENTER OF PROPOSED TOWER:

LAT 44'22'57.83" N LON 68'19'00.23" W EXISTING GROUND ELEV=150.6'

5. OWNER: RICHARD TAYLOR 134 KETTERIDGE ROAD BAR HARBOR, ME 04609

6. SITE NAME:

BAR HARBOR SOUTH

7. SITE NUMBER:

2267 8. SITE ADDRESS: 134 KITTERIDGE ROAD

9. APPLICANT:

BAR HARBOR, ME 04609 AT&T MOBILITY 550 COCHITUATE ROAD SUITE 13 & 14 FRAMINGHAM, MA 01701

10. JURISDICTION:

BAR HARBOR, ME 04609

MAP 235 LOT 30

12. DEED REFERENCE: BOOK 1282 PAGE 118

13. PLAT REFERENCE: PLAN BOOK 14 PLAN 177

14. TRUE NORTH BASED ON GPS

15. ELEVATIONS AND COORDINATES FROM GPS LOCATIONS.

ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SUFFACE EVIDENCE AND PLANS OF RECORD. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL SITE WORK.
CALL DISASTE 1-88B-DIG-SAFE OR 811 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.

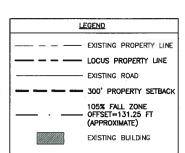
ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED MONOPINE ON THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS ZONE C, NOT WITHIN THE 100 YEAR FLOOD BOUNDARY. COMMUNITY PANEL NO. 230064A 0005 AUGUST 6, 1976

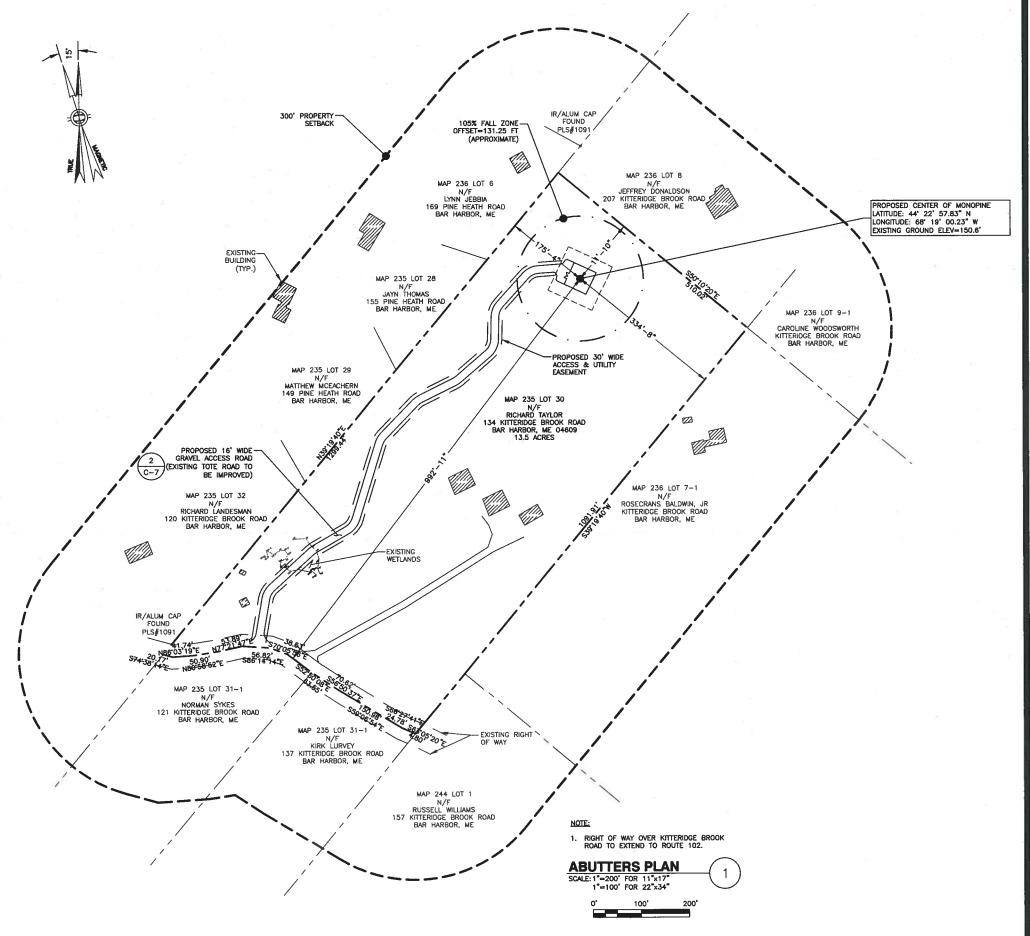
PROPERTY LINE INFORMATION IS COMPILED FROM DEEDS AND PLANS OF RECORD AND IS NOT THE RESULT OF A FULL BOUNDARY SURVEY.

19. BEARING SYSTEM OF THIS PLAN IS BASED ON GRID

20. SURVEY PERFORMED BY: COLONIAL SURVEYING CO, INC. 28 WOODLAND WAY

ZON	VING INFOR	NOITAM	
DISTRICT: DD - TOWN	HILL RURAL		
11.1	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA:	40,000 S.F.	13.5 ACRES	N/C
MAX HEIGHT:	40'	UNKNOWN	10' (SHELTER)
MIN. FRONTAGE:	200'	576.78'	N/C
MIN. FRONT YARD DEPTH:	75'	82'±	993'±
MIN. SIDE YARD DEPTH:	25'	12'±	175'±
MIN. REAR YARD DEPTH:	25'	561±	142'±
MIN LOT COVERAGE:	25%	4.98%	8.32%±
TOWER SETBACK: 10	131.25' 5% TOWER HEIGHT	N/A	142'±





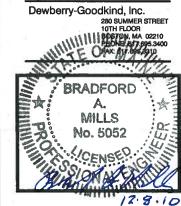


550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

BAR HARBOR SOUTH **SITE NO.: 2267** 

CONSTRUCTION DRAWING		
- 12		
155		
H		
-	12/08/10	FOR SUBMITTAL
├-		
0	09/03/10	FOR SUBMITTAL
Α	08/18/10	FOR COMMENT

# Dewberry\*



DRAWN BY: SK REVIEWED BY: GMT

PPB

50003936

JOB NUMBER: 50040092

PROJECT NUMBER: SITE ADDRESS

CHECKED BY:

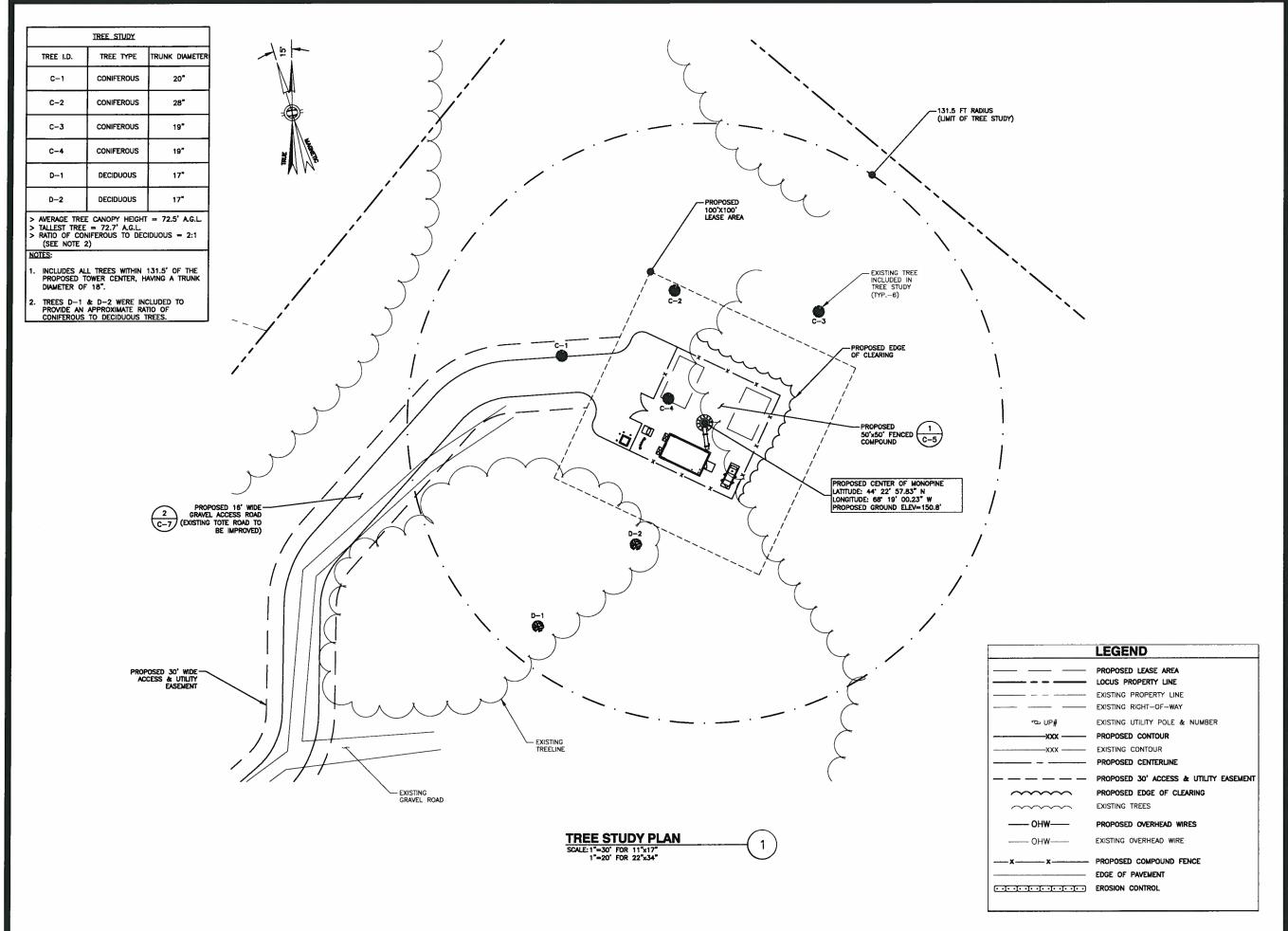
134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

ABUTTERS PLAN

SHEET NUMBER

C - 1





FRAMINGHAM, MA 01701

SUITES 13 & 14

BAR HARBOR SOUTH SITE NO.: 2267

	CONSTRUCTION DRAWINGS		
П			
	1	12/08/10	FOR SUBMITTAL
	0	09/03/10	FOR SUBMITTAL
	A	08/18/10	FOR COMMENT

# Dewberry

Dewberry-Goodkind, Inc.
289 SUMMER STREET
10TH FLOOR
10

DRAWN BY:	SK
REVIEWED BY:	GMT
CHECKED BY:	PPB
JOB NUMBER:	50040092
PROJECT NUMBER:	50003936

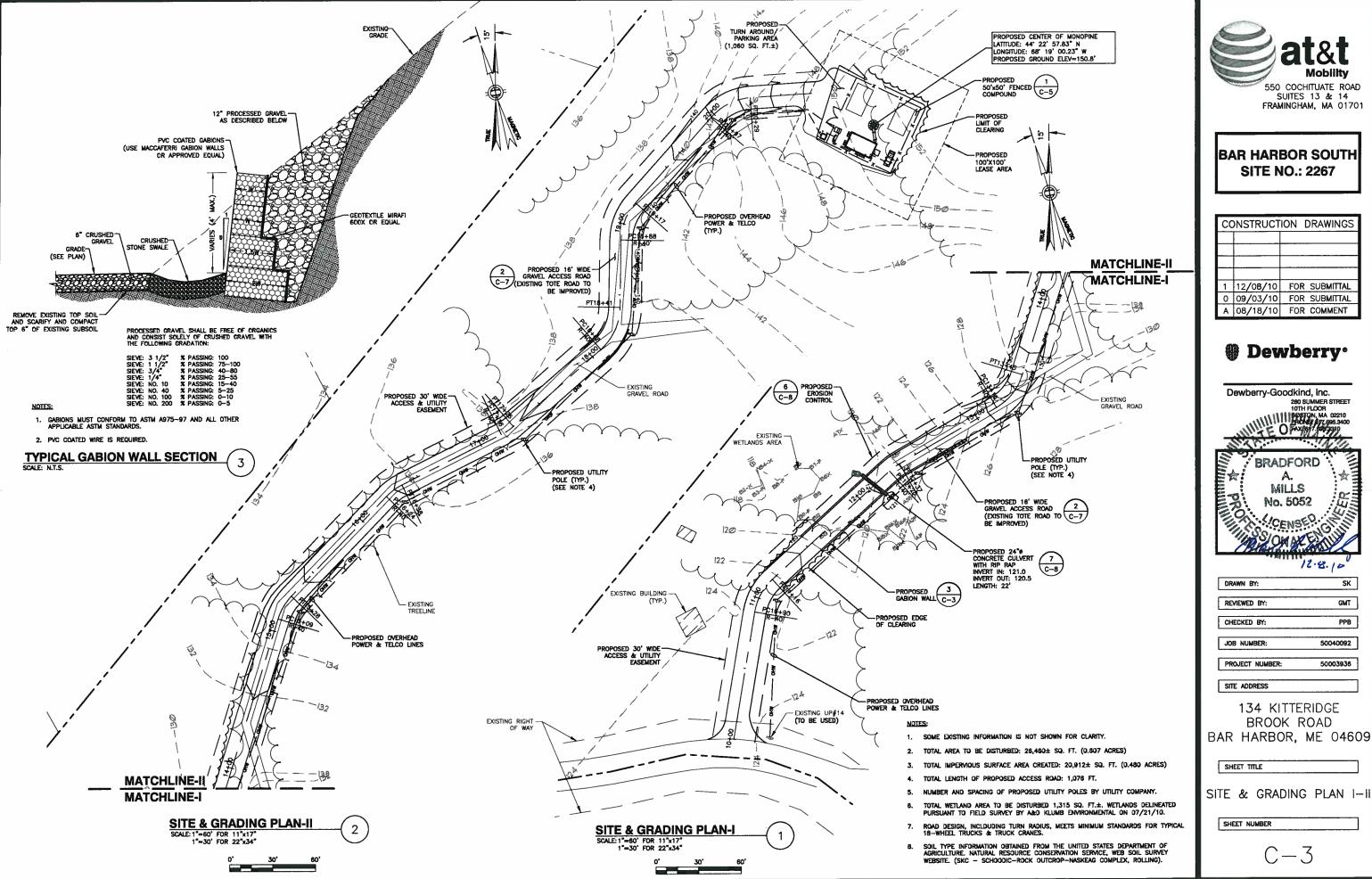
134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

TREE STUDY PLAN

SHEET NUMBER

C-2

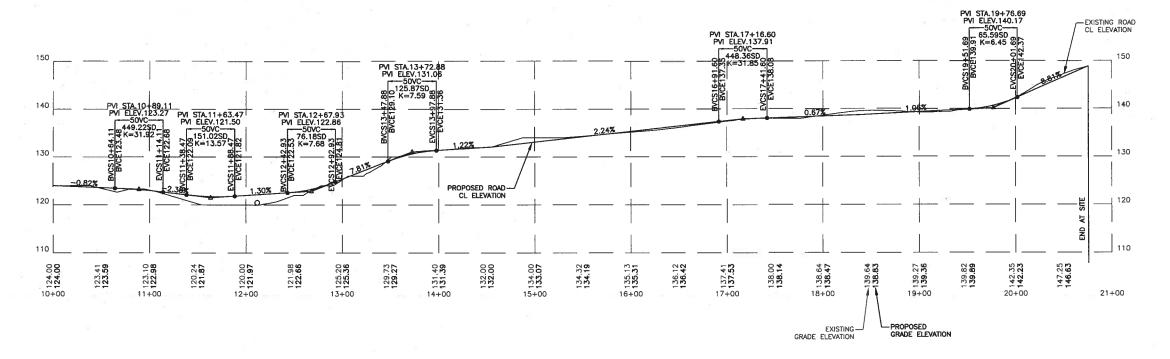


	CC	NSTRUCT	ION	DRAWINGS
ı				
П				
ı				
1				
ı	1	12/08/10	FOR	SUBMITTAL
	0	09/03/10	FOR	SUBMITTAL
	Α	08/18/10	FOR	COMMENT

BAR HARBOR, ME 04609

### LEGEND

BVCS-BEGINNING OF VERTICAL CURVE STATION
BVCE-BEGINNING OF VERTICAL CURVE ELEVATION
EVCS-END OF VERTICAL CURVE STATION
EVCE-END OF VERTICAL CURVE ELEVATION
PVI -POINT OF VERTICAL INTERSECTION



NOTE:

1. THE PROPOSED ACCESS ROAD DROPS DOES NOT EXCEED 8.81% SLOPE.

ROAD PROFILE

HORIZONTAL SCALE: 1"=100' FOR 11"x17" VERTICAL SCALE: 1"=20' FOR 11"x17" 1"=50' FOR 22"x34"

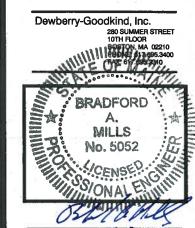
0' 50' 100' 0' 10' 20'



BAR HARBOR SOUTH SITE NO.: 2267

~~
GS
AL
AL
IT

# Dewberry\*



DRAWN BY: 12-9-/0 SK

REVIEWED BY:

OUEQUED DV

JOB NUMBER: 50040092

GMT

PPB

PROJECT NUMBER: 50003936

SITE ADDRESS

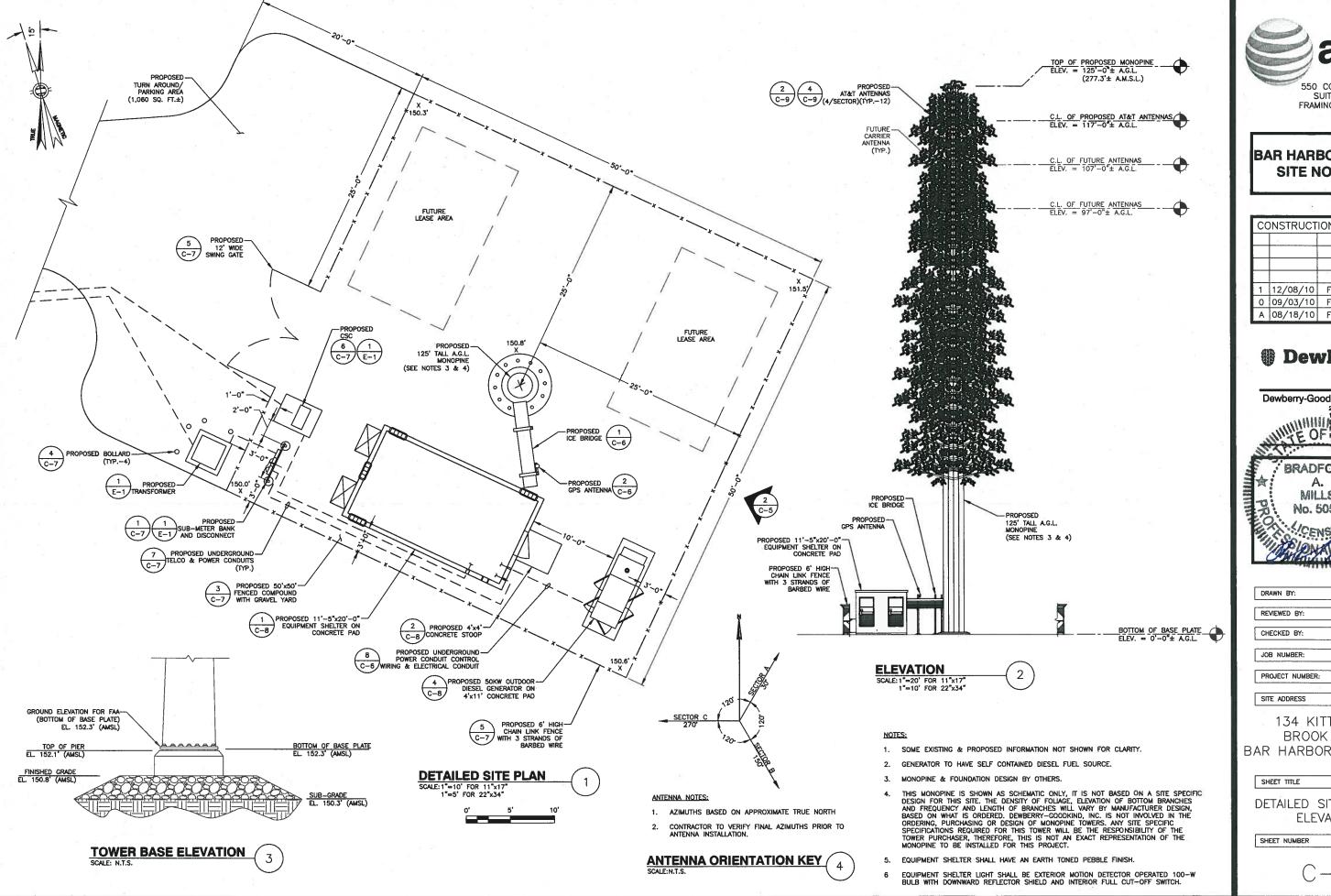
134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

ROAD PROFILE

SHEET NUMBER

C-4





SUITES 13 & 14 FRAMINGHAM, MA 01701

**BAR HARBOR SOUTH SITE NO.: 2267** 

CONSTRUCTION DRAWINGS			
	16		
		14	
		<i>₹</i> 0	
1	12/08/10	FOR SUBMITTAL	
0	09/03/10	FOR SUBMITTAL	
Α	08/18/10	FOR COMMENT	

# Dewberry\*

Dewberry-Goodkind, Inc. 280 SUMMER STREET 280 SUMMER STREET TOTH FLOOR 10-97CN, MA 02210 PSCM-F617-695-3400 FF FM 617-695-3400 BRADFORD MILLS No. 5052

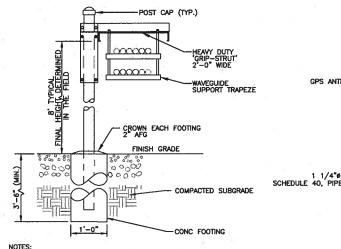
12-8-16

DRAWN BY:	SK
REVIEWED BY:	GMT
CHECKED BY:	PPB

50040092 50003936

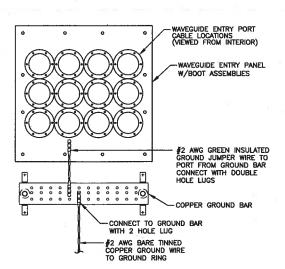
134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

DETAILED SITE PLAN & **ELEVATION** 



- ICE BRIDGE SHALL BE VALMONT GRIP STRUT TRANSMISSION LINE BRIDGE KIT (P/N: B2734) OR APPROVED EQUAL.
- CABLE SUPPORT SHALL BE VALMONT DOUBLE LEVEL CHANNEL (P/N: 802264) OR APPROVED EQUAL.
- ALL COMPONENTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S
- CONTRACTOR SHALL DETERMINE REQUIRED QUANTITY OF ALL ICE BRIDGE COMPONENTS.
- SNAP-IN HANGERS, SPLICE KITS, HINGE KITS, EXTENSION KITS, STIFFENERS, AND OTHER MISCELLANEOUS HARDWARE SHALL BE PROVIDED BY THE CONTRACTOR AS
- ICE BRIDGE SHALL BE ROUTED TO ACCOMMODATE THE MINIMUM BENDING RADIUS OF THE COAXIAL CABLE.
- ICE BRIDGE COMPONENTS SHOWN ARE SCHEMATIC, CONSULT MANUFACTURER FOR EXACT AND CURRENT SPECIFICATIONS.





#### NOTE:

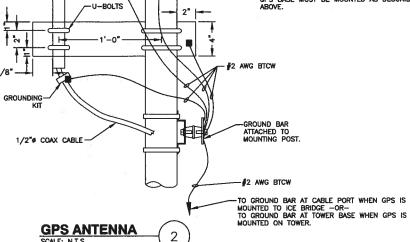
CONTRACTOR SHALL INSTALL AS SHOWN UNLESS GROUND BAR IS PREINSTALLED BY SHELTER MANUFACTURER.

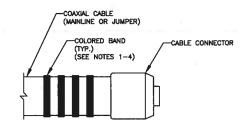
## **CABLE PORT GROUNDING ON INTERIOR OF SHELTER (INTERIOR VIEW)**

SCALE: N.T.S.

#### NOTES:

- THE ELEVATION AND LOCATION OF THE GPS ANTENNA SHALL BE IN ACCORDANCE WITH THE FINAL RF REPORT.
- THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1--1/4" DIAMETER, SCHEDULE 40 GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END, THE PIPE SHALL BE CUT TO THE AL THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 18") USING HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.
- 3. THE MOUNTING PLATE SHALL BE FABRICATED AS SHOWN USING THE MOUNTING PLATE SHALL BE FABRICATED AS SHOWN USING 3/8" THICK GALVANIZED STEEL, AND ATTACHED TO THE APPROPRIATE SUPPORT STRUCTURE USING U-BOLTS. THE SUPPORT PIPE SHALL THEN BE ATTACHED TO THE MOUNTING PLATE USING THE OVERSIZED U-BOLTS PROVIDED TO ALLOW FOR ADJUSTMENT. IT IS CRITICAL THAT THE BASE OF THE GPS IS MOUNTED SUCH THAT IT IS WITHIN 2 DEGREES OF THE VERTICAL AND THE BASE OF THE GPS IS WITHIN 2 DEGREES OF THE LEVEL.
- 4. MOUNTING PLATE MAY BE SUBSTITUTED WITH VALMONT UNIVERSAL MOUNTING KIT (P/N B1841) OR APPROVED EQUAL GPS BASE MUST BE MOUNTED AS DESCRIBED IN NOTE 3





EXOTHERMICALLY WELDED

(CADWELD OR APPROVED

MOUNTING POST

CONNECTION (TYP.)

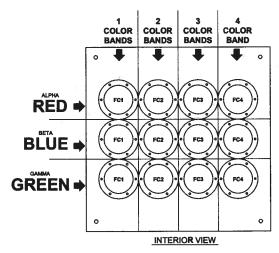
EQUAL)

GPS ANTENNA

1 1/4"ø.-

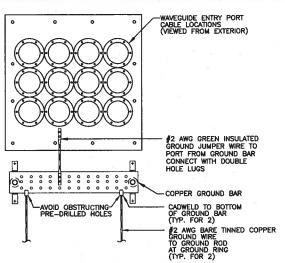
- COLOR CODING SHALL BE PLACED ON BOTH ENDS OF ALL MAINLINE COAXIAL CABLES AND ALL JUMPER CABLES NEAR THE CONNECTORS. COLOR CODING SHALL ALSO BE PLACED ON EACH MAINLINE COAX ON THE EXTERIOR OF THE SHELTER NEAR THE CABLE PORT.
- 2. COLORED TAPE SHALL BE MINIMUM 3/4" WIDE.
- THE SPACING BETWEEN THE COLORED BANDS SHALL NOT BE LESS THAN THE THICKNESS OF THE COLORED TAPE.
- 4. COLOR AND QUANTITY OF COLORED BANDS SHALL BE AS SPECIFIED IN THE RF SCHEDULE.

**CABLE COLOR CODING DETAIL** 6 SCALE: N.T.S.

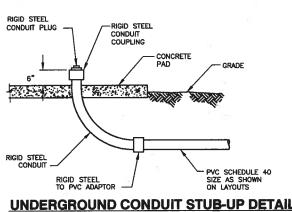


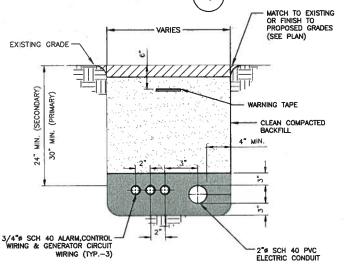
## COAX COLOR CODING AND LABELING DETAIL

SCALE: N.T.S.



## **CABLE PORT GROUNDING EXTERIOR OF SHELTER (EXTERIOR VIEW)**





#### NOTES:

- IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
- IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
- 3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL

## **GENERATOR SERVICE TRENCH CONDUIT**

550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

**BAR HARBOR SOUTH SITE NO.: 2267** 

CC	NSTRUCT	ION DRAWINGS
1	12/08/10	FOR SUBMITTAL
0	09/03/10	
Α:	08/18/10	FOR COMMENT

# Dewberry\*

	O SUMMER STREET OTH FLOOR
WINTE OF	OSTON, MA 02210 (1) 15: 817.895.3400 (4) 17.895.3310
BRADEC	ORD I
A. MILLS	
No. 505	52
IIIISSIONAL	ENGILLI
Oran	12.8.10
DRAWN BY:	SK

REVIEWED BY: GMT CHECKED BY: PPB

JOB NUMBER 50040092 PROJECT NUMBER: 50003936

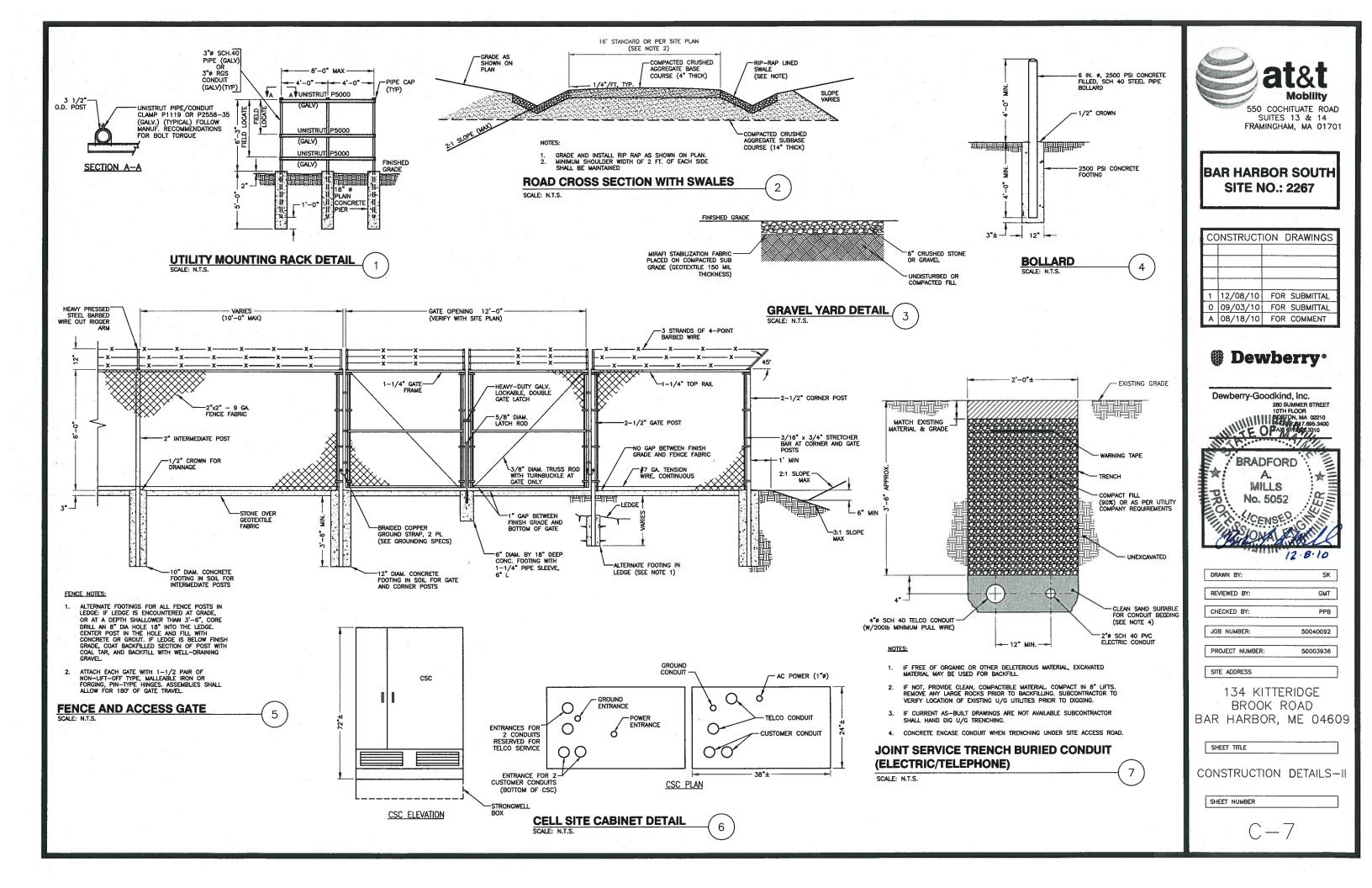
SITE ADDRESS

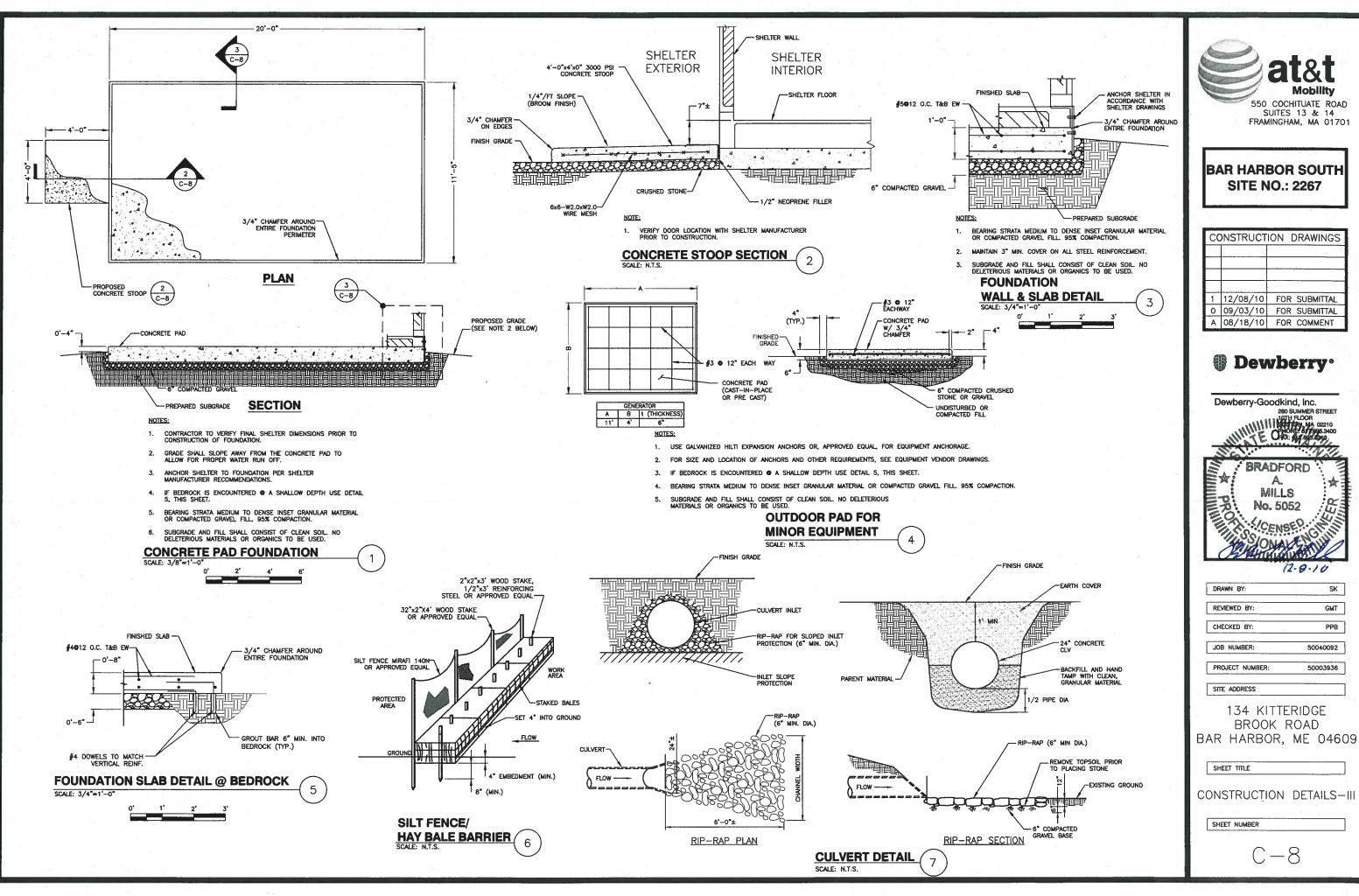
134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

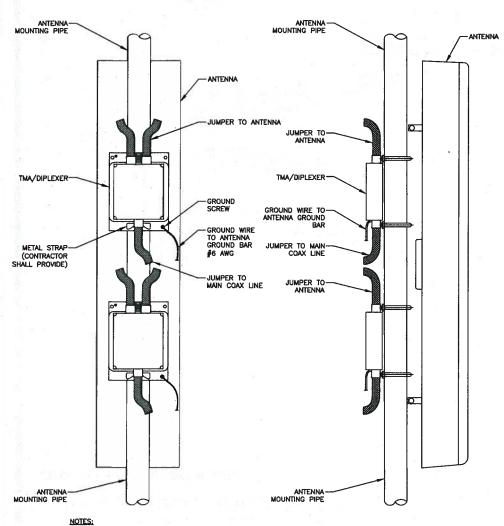
SHEET TITLE

CONSTRUCTION DETAILS-I

SHEET NUMBER

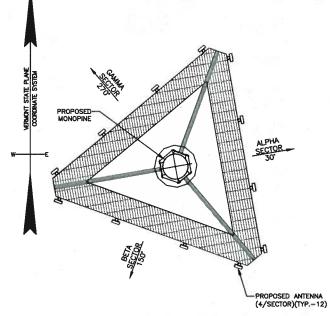






- 1. TMA IS WEATHERPROOFED ENCLOSURE RATED TO IP65.
- 2. TMA SHALL NOT BE PAINTED. A LABEL STATING "DO NOT PAINT" IS PROVIDED WITH TMA AND SHALL BE MOUNTED ON UNIT WHERE IT IS CLEARLY VISIBLE.
- 3. IF POSSIBLE, TWA SHALL BE MOUNTED BEHIND ANTENNA TO MINIMIZE WIND LOADING ON STRUCTURE.
- PROVIDE SUFFICIENT LENGTH OF JUMPER TO ALLOW FOR PROPER APPLICATION OF WEATHER PROOFING AT ANTENNA
- 5. BOND TMA GROUND STUD TO GROUND BAR WITH NO. 6 AWG GROUND WIRE AND 2-HOLE GROUND LUG.
- 6. BACKPLATE AND POLE CLAMPS FOR MOUNTING TO 2 3/8" DIA. ANTENNA MOUNTING PIPE PROVIDED WITH TMA.
- 7. TMA SHALL BE MOUNTED VERTICALLY.
- 8. JUMPER CABLES SHALL BE SUPPORTED WITHIN 1 TO 2 FEET OF CONNECTORS.

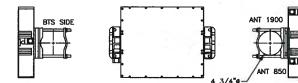
**TOWER MOUNTED AMPLIFIER/DIPLEXER MOUNTING** SCALE: N.T.S.



#### NOTES:

- ANTENNA MOUNTING FRAME TO BE INSTALLED PER TOWER DESIGN & STRUCTURAL ANALYSIS.
- PROPOSED ANTENNA DIMENSIONS ARE 55"x11"x5" (1.78 CUBIC FEET, THE TOTAL FOR 12 ANTENNAS IS 21.2 CUBIC FEET, TOTAL VOLUME OF ANTENNAS & ARRAY IS 34.3 CUBIC FEET.

# PLATFORM ANTENNA ORIENTATION



#### NOTES:

#### MOUNTING TO A POLE OR BEAM

ASSEMBLE THE POLE MOUNTING HARDWARE ON THE TMA AND INSTALL THE DESIRED LOCATION AS SHOWN IN DETAIL 1, THIS SHEET.

- INSERT THE 3/8-16 UNC x 7" LG (M8 X 180MM) HEX BOLTS WITH THE WASHERS THROUGH THE HOLES IN THE THA BRACKETS, BOLTS AND WASHERS MAY BE PRE-INSTALLED ON SOME VERSIONS OF THE ETB
- ORIENT THE TMA IN THE SELECTED LOCATION WITH THE BTS PORT POINTING DOWN, OR AS REQUIRED. ALIGN THE V-GRIPS OF THE TMA BRACKETS WITH THE POLE OR THE TOWER MEMBER.
- ATTACH THE REAR BRACKETS TO THE HEX BOLTS AND INSTALL. FLAT WASHER, SPLIT LOCK WASHER, AND THE HEX NUT ON EACH BOLT. TIGHTEN HEX NUTS SECURELY WHILE MAINTAINING ALIGNMENT BETWEEN TMA BRACKET AND REAR BRACKET.
- 4. ATTACH A GROUND CABLE TO THE TMA USING THE PRE-INSTALLED HEX BOLT AND WASHERS. ROUTE THE GROUND CABLE TO THE GROUND BAR ON THE TOWER STRUCTURE AND ATTACH SECURELY WITH SUITABLE

#### MOUNTING TO A WALL

- 1. THE REAR BRACKETS AND HARDWARE ARE NOT USED.
- 2. IF PRE-INSTALLED. 3/8-16 UNC x 6 1/4" LG (M8 X 160 MM) HEX BOLTS MUST BE REMOVED PRIOR TO WALL-MOUNTING. UNDO THE TWO CAP SCREWS TO DETACH THE TMA BRACKET AND RETRACT THE BOLTS. RE-INSTALL THE TMA BRACKETS AND TIGHTEN THE CAP SCREWS SECURELY.

- ROUTE A JUMPER CABLE FROM THE 850 MHz
  ANTENNA TO THE TMA PORT MARKED "ANT 850".
  ROUTE A SECOND JUMPER CABLE FROM THE 1900
  MHz ANTENNA TO THE TMA PORT MARKED "ANT 1900".
  ROUTE A THIRD JUMPER CABLE FROM THE TMA PORT
  MARKED "BTS" TO THE TOWER FEEDER. BE SURE TO
  PROVIDE ADEQUATE CURVE OR LOOP TO RELIEVE
  UNDUE STRAIN ON CONNECTIONS AT EITHER END.
- TIGHTEN RF CONNECTIONS TO 18-FT-LBS (25Nm)
- WEATHERSEAL THE CABLE CONNECTIONS PER STANDARD PRACTICES IF REQUIRED BY LOCAL CONDITIONS. PROVIDED MATERIALS, IF ANY, CAN BE APPLIED ACCORDING TO THE INSTRUCTIONS ON THE PACKAGE.
- APPLY CABLE TIES OR STRAPS (NOT SUPPLIED TO SECURE THE CABLES TO THE TOWER STRUCTURE.
- CONTRACTOR TO VERIFY MOUNTING HARDWARE SIZE.
- 10. CONTRACTOR TO CONSULT PLUMBING DIAGRAM PRIOR TO INSTALLATION.

#### NOTES:

THE TWA CAN BE MOUNTED TO A SUITABLE FLAT SURFACE.

- MOUNT THE TMA TO THE WALL USING FOUR 5/16" OR 3. 8MM BOLTS (NOT SUPPLIED) THROUGH THE HOLES IN THE TMA BRACKETS.
- CONNECT RF AND GROUND CABLES, WEATHERSEAL AND SECURE WITH STRAPS AS OUTLINED ABOVE.

3

5. CONTRACTOR TO VERIFY MOUNTING HARDWARE SIZE.

# TMA MOUNTING DETAIL

4

ANTENNA AND COAXIAL CABLE BILL OF MATERIALS COAX CABLE MECHANICA DOWNTILT COAXIAL CABL SECTOR STATUS COLOR CODE COAXIAL CABLE TMA DIPLEXER ANTENNA TRUE NORTH CENTER LENGTH (2) 1 5/8" COMMSCOPE POWERWAVE OPOSE IR & IIR воттом 30° 117' 2 @ 160' o 800-10121 T08-19DB111 (2) 1 5/8" COMMSCOPE DOWEDWAVE IIA ROPOSE IIIR & IVR воттом 30° 117' 2 0 160' o 800-10121 08-19DB111-(2) 1 5/8" COMMSCOPE POWERWAVE IIIA ROPOSE воттом 30 117' 2 9 160' o 800-10121 F08-19DB111-KATHREIN 800-10121 (2) 1 5/8" COMMSCOPE POWERWAVE воттом 0. IVA ROPOSE VIR & VIIR 30° 117' 2 0 160' TO8-19DB111-(2) 1 5/8" COMMSCOPE KATHREIN POWERWAVE IΒ ROPOSE IB & IIB BOTTOM 150° 117' 2 @ 160' 0. 800-10121 TO8-19DB111-KATHREIN (2) 1 5/8° COMMSCOPE POWERWAVE ROPOSED IIIB & IVB воттом 150° 117 2 9 160' 0. 800-10121 08-19DB111-(2) 1 5/8" COMMSCOPE POWERWAVE ROPOSED VB & VIB воттом 150 117' 2 0 160' 0. IIIB 800-10121 TO8-19DB111-(2) 1 5/8" COMMSCOPE POWERWAVE KATHREIN VIIB & VIIIE воттом 150° 0. ΙVΒ ROPOSED 117' 2 0 160' 800-10121 T08-190B111-KATHREIN (2) 1 5/8" COMMSCOPE POWERWAVE IG ROPOSE IG & IIG воттом 270 117' 2 0 160 O\* 800-10121 T08-19DB111-KATHREIN (2) 1 5/8" COMMSCOPE POWFRWAVE IIG ROPOSE IIIG & IVG воттом 270° 117' 2 0 160' 800-10121 T08-19DB111-POWERWAVE (2) 1 5/8" COMMSCOPE HIG ROPOSE VG & VIG воттом 270° 117' 2 9 160' 0° 800-10121 T08-19DB111-(2) 1 5/8" COMMSCOPE POWERWAVE KATHREIN воттом 270° 117' 0° -IVG ROPOSE VIIG & VIIIG 2 0 160' 800-10121 T08-19DB111-TOTAL 12 3,840 12 0

#### NOTE:

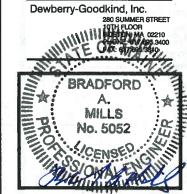
B.O.M. PROVIDED WITHOUT THE BENEFIT OF AN RFDS. USE FINAL RFDS FOR BIDDING & INSTALLATION. NOTIFY DEWBERRY OF ANY DISCREPANCIES.

ANTENNA AND COAXIAL CABLE B.O.M.



CC	CONSTRUCTION DRAWINGS		
	I L		
	11		
1	12/08/10	FOR SUBMITTAL	
0	09/03/10	FOR SUBMITTAL	
Α	08/18/10	FOR COMMENT	





DRAWN BY: SK REVIEWED BY: GMT

CHECKED BY: PPB

JOB NUMBER: 50040092 50003936 PROJECT NUMBER

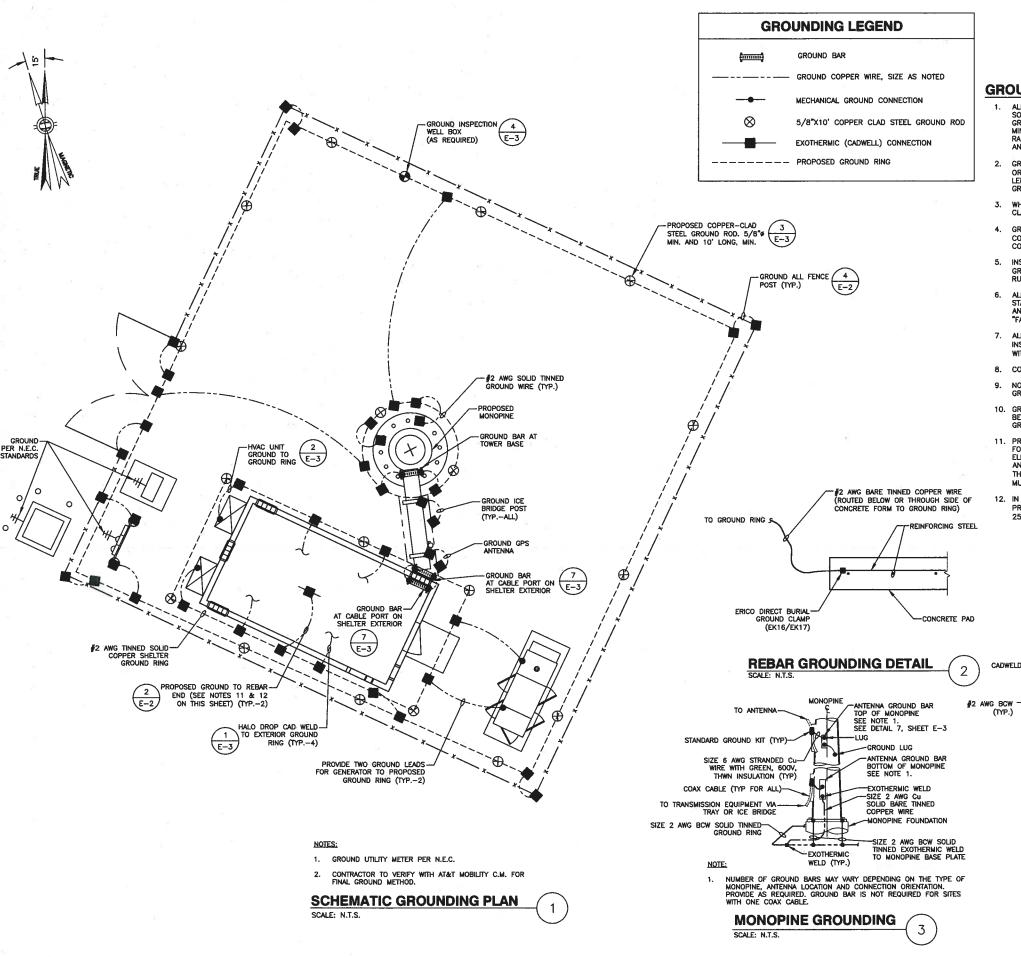
SITE ADDRESS

134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

ANTENNA B.O.M. & ANTENNA DETAILS

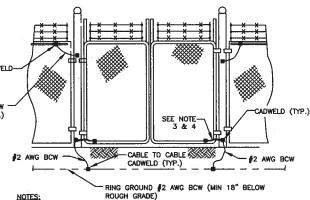
SHEET NUMBER



#### **GROUNDING GENERAL NOTES**

- ALL DOWN CONDUCTORS AND GROUND THE RING CONDUCTOR SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO GROUND RING SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE AT A MINIMUM DEPTH BELOW GRADE OF 18 INCHES OR TO LEDGE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION, UNLESS OTHERWISE NOTED.
- GROUND RODS SHALL BE 5/8" DIAMETER COPPER CLAD, HARGER, T&B, ERICO, OR EQUIVALENT. TOP OF ROD SHALL BE A MINIMUM OF 18" BELOW GRADE. IF LEDGE IS ENCOUNTERED, INSTALL GROUND ROD AT AN ANGLE. ELECTRICAL METER GROUND ROD EXCEPTED.
- WHERE MECHANICAL CONNECTIONS ARE SPECIFIED, BOLTED, COMPRESSION—TYPE, CLAMPS OR SPLIT—BOLT TYPE CONNECTORS SHALL BE USED.
- GRIND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELD 

  2
  CONDUCTOR AT 6" ABOVE GRADE OR FOUNDATION, WHICHEVER IS HIGHER.
  COLD—GALV AFTER. EXOTHERMICALLY WELD OTHER END TO GROUND RING.
- INSTALL GROUNDING KITS AT ANTENNA CENTERLINE, AND TOWER EXIT POINTS. GROUND COAX LINES. EXOTHERMICALLY WELD #2 DOWN CONDUCTOR TO PLATES, RUN DOWN TOWER, AND TIE INTO GROUNDING SYSTEM.
- 6. ALL GROUNDING WORK SHALL COMPLY WITH AT&T CONSTRUCTION CONTRACT STANDARDS. FOLLOWING COMPLETION OF WORK, GROUND SYSTEM MUST BE TESTED AND SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS SUBMIT AN INDEPENDENT "FALL POTENTIAL" TESTING REPORT.
- ALL GROUNDING CONDUCTORS ON EXTERIOR WALL OF SHELTER SHALL BE INSTALLED IN 3/4" SCH 40 PVC CONDUIT TO 12" BELOW GRADE. ATTACH PVC WITH GALVANIZED "C" CLAMPS.
- 8. CONTRACTOR SHALL HAND-DIG IN AREAS AROUND EXISTING UTILITIES.
- NOTIFY CONSTRUCTION ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- GROUNDING RING IS SHOWN AS SCHEMATIC ONLY. IT IS DESIGNED WITHOUT BENEFIT OF RESISTIVITY TESTING AND DOES NOT NECESSARILY REPRESENT A GROUNDING SYSTEM TO MEET ANY SPECIFIC GROUND RESISTANCE.
- 11. PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE, BY STEEL TIES OF OTHER EFFECTIVE MEANS APPROVED BY NEC 2008 AND STRUCTURAL ENGINEER, AND BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS. (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE AND MUST BE COODINATED BY CONTRACTOR.)
- IN ACCORDANCE WITH NEC 2008 REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE 2008 NEC ARTICLE 250.50).



- THE #2 AWG, BCW, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST ABOVE GRADE.
- 2. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING.
- GATE JUMPER SHALL BE #4/O AWG WELDING CABLE OR FLEXIBLE COPPER BRAID BURNDY TYPE B WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
- GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

FENCE GROUNDING DETAIL
SCALE: N.T.S.



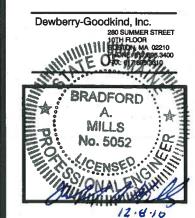


BAR HARBOR SOUTH SITE NO.: 2267

SUITES 13 & 14 FRAMINGHAM, MA 01701

CC	NSTRUCT	ION DRAWINGS
	25	
	_0 1	
	5	9
1	12/08/10	FOR SUBMITTAL
0	09/03/10	FOR SUBMITTAL
Α	08/18/10	FOR COMMENT

# Dewberry\*



DRAWN BY:	SK
REVIEWED BY:	GMT
CHECKED BY:	PPB
JOB NUMBER:	50040092

PROJECT NUMBER: 50003936

SITE ADDRESS

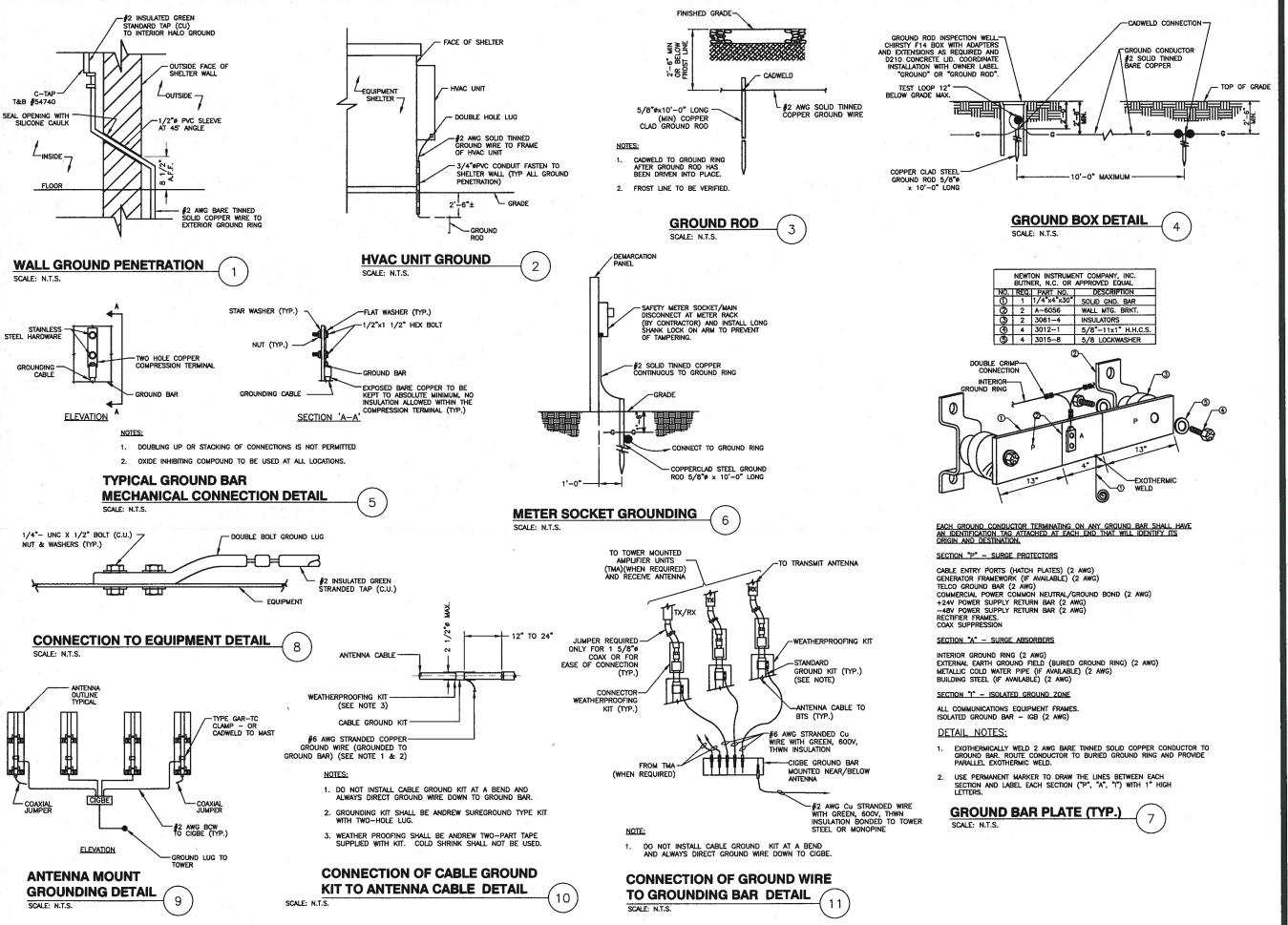
134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

SCHEMATIC GROUNDING PLAN

SHEET NUMBER

E-2



at&t

550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

BAR HARBOR SOUTH SITE NO.: 2267

CONSTRUCTION DRAWINGS		
		* 1 5-
	0' 1	
-		
1	12/08/10	FOR SUBMITTAL
0	09/03/10	FOR SUBMITTAL
Α	08/18/10	FOR COMMENT

# Dewberry

Dewberry-Goodkind, Inc.
280 SUMMER STREET
10TH FLOOR
POSTON, MA 02210
PAR 17-85-3400
PAR 17-85-3400
A.
MILLS
No. 5052
ON AL

DRAWN BY: SK

GMT

PPB

50040092

50003936

REVIEWED BY:

CHECKED BY:

JOB NUMBER:

PROJECT NUMBER:

SITE ADDRESS

134 KITTERIDGE BROOK ROAD BAR HARBOR, ME 04609

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

F-3